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(71)Applicant:

**TOYOTA MOTOR CORP** 

(72)Inventor:

YAMAMOTO TAKASHI SUZUKI TADAYUKI YAMAUCHI YOJI

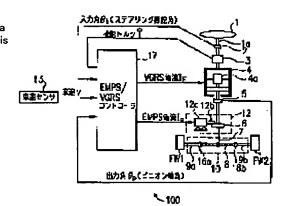
## (54) STEERING DEVICE

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## (57)Abstract:

PROBLEM TO BE SOLVED: To prevent a sense of incongruity from being given in vehicle operation due to a variation in reactional force by compensating, by a power assist actuator, at least a part of torque required to control a steering wheel turning angle by a variable gear ratio actuator based on a steering wheel steer angle.

SOLUTION: A variable gear ratio actuator 4 is installed on a steering shaft 1a, and a power assist actuator 12 is installed on the output side of the variable gear ratio actuator 4. Also, by a controller 17 into which detected signals from various types of sensors and input, a difference is obtained between torque necessary to control the steering wheel turning angle based on a steering wheel steer angle by the variable gear ratio actuator 4 according to the operating conditions and specified torque of the variable gear ratio actuator 4, and the power assist actuator 12 is controlled so that the difference can be compensated. In addition, the variable gear ratio actuator 4 controls a feed forward based on an output from a torque sensor 3 and a target current from the power assist actuator 12.



## **LEGAL STATUS**

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